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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 807,055	07/09/2001	Olaf Kunz	10191/1735	2184

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EXAMINER

LEYKIN, RITA

ART UNIT PAPER NUMBER

2837

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,055

Applicant(s)

KUNZ ET AL.

Examiner

Rita Leykin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to amendment, filed on April 21, 2003.

In provided remarks applicant is arguing that prior art does not teach or suggests in combination claimed limitations, such as "device for monitoring at least one measuring system for detecting at least one measured quantity of an electric drive, including at least one controller for receiving at least one measured quantity detected by the at least one measuring system and for generating at least one manipulated variable for controlling the electric drive" and others.

It is the examiner responsibility to interpret claim language as broad as possible. Terminology, such as for instance - measuring system configured to detect at least one measuring quantity is very broad definition for many different devices and systems. In the submitted prior art by Nashiki, such measuring system for detecting at least one measured quantity of electric drive is combination of motor position sensor 8 and motor speed sensor 5, where in the measured quantity is motor speed. The function of controller for receiving the measured quantity based on error that is determined by the subtracter 1, that getting a speed command VLC and subtracts the rotational speed VL from the speed command to determine the speed error DVL. The speed error is compensated by PID compensator 2, which in turn generates the torque command value T toward the current command value setting means 13. Wherein torque and current are manipulated variables for controlling the motor. This setting reads on

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applicant's controller and error detection as in provided independent claims. The same approach is used in case of other limitations.

Based on above examiner maintains the rejection as follows.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-21, 25 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Nashiki US # 5,469,215.

Nashiki teaches that current and voltage applied to the electric motor can be compensated depending on changes in the rotational speed, position and torque of the electric motor, (see column 4, lines 9-13)

In Nashiki a control system comprises a position sensor 8 for sensing the rotational position of 3-phase synchronous motor 7. The position sensor 8 is connected to a speed sensor 5 for sensing a rotational speed based on rotor position and a current command value setting means 13. The speed sensor is connected to a subtracter 1 for subtracting the detected rotational speed from a speed command to determine speed error.

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The subtracter 1 is connected to PID compensator 2 for compensating the speed error and to output a torque command value.

The current command value setting means 13 is connected to the memory 61 being compensation storage means for storing torque error compensation data corresponding to the torque, rotational speed, position, and further to a power amplifier 4 for supplying 3-phase currents that are corresponding to the motor current commands.

As it shown in a block diagram of Fig. 5 Nashiki teaches an adder 12 operative as a motor current preparing means, for preparing motor current amplitude based on torque command and also on torque error compensating data, read out from the memory 61.

The error compensation data stored in memory 61 depends on motor three parameters as shown in Fig. 6, (see column 5, lines 1-56, column 5, lines 16-67).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nashiki US # 5,469,215.

In Nashiki discussion of Fig.9-11 is related to claimed structure and limitations of the above claims. Nashiki teaching can be applied to a control system for a 3-phase ac motor performing two-to-three phase conversion and further to any other control system for multi-phase, multi-pole motors, dc motors and induction motors, (see column 7, lines 11-67, column 8 – column 9).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (703)308-5828. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703)308-3370.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Rita Leykin
Primary Examiner
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A handwritten signature in cursive script that reads "Rita Leykin".

R.L.
May 9, 2003